	Application No.	Applicant(s)
Notice of Allowability	10/809,516	KOBAYASHI ET AL.
	Examiner	Art Unit
	Paulos M. Natnael	2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *preliminary amendment received 3/26/04*.

2. ☒ The allowed claim(s) is/are *1-8*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☒ All   b) ☐ Some*   c) ☐ None   of the:

   1. ☒ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
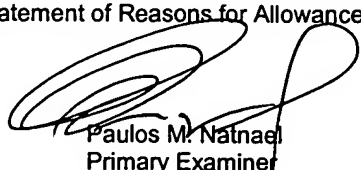
   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

   1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
   Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

Paulos M. Natnael
Primary Examiner
Art Unit 2622

DETAILED ACTION

Allowable Subject Matter

1.   Claims **1-8** are allowed.

2.   The following is an examiner's statement of reasons for allowance: the prior art

fails to disclose the following combination of limitations comprising: A video signal

processor comprising: a first motion detection unit for finding a difference between a

luminance signal included in a predetermined composite video signal in a current frame

composite video and a luminance signal included in a signal in a past frame having

a predetermined time interval and outputting a first motion detection signal in

accordance with the difference; a second motion detection unit for extracting luminance

signals included in a plurality of composite video signals in said current frame based on

a plurality of composite video signals having a predetermined interval in a vertical

direction in said current frame and a plurality of predetermined composite video signals

in the vertical direction at the same position in said past frame, detecting the correlation

of color signal components remaining in the extracted video signals, and outputting a

second motion detection signal in accordance with the result of the detection; a color

signal difference calculating means for calculating a difference of absolute values of

color signals in the current frame calculated based on said three composite video

signals in said current frame and color signals in the past frame calculated based on the

of said composite video signals past frame; a selecting means for selecting the

difference of said color signals calculated by said color signal difference calculating

means when either of said first motion detection signal or said second motion detection

signal indicates that there is motion and selecting an intended value indicating that there

is no motion when both of said first motion detection signal and said second motion

detection signal indicate that there is no motion; and a motion coefficient generating

means for outputting a motion coefficient indicating motion in accordance with the value

selected by said selecting means, as in claim 1;

A video signal processor a first motion detection comprising: difference between

a luminance unit for finding a signal included in a predetermined composite video signal

in a current frame and a luminance signal included in a composite video signal in a past

frame having a predetermined time interval and outputting a first motion detection signal

in accordance with the difference; a second motion detection unit for extracting

luminance signals included in three composite video signals in said current frame based

on three composite video signals having a predetermined interval in a vertical direction

in said current frame and three predetermined composite video signals in the vertical

direction at the same position in said past frame, detecting the correlation of color signal

components remaining in the extracted video signals, and outputting a second motion

detection signal in accordance result of the detection; with the a color signal difference

calculating means for calculating a difference of absolute values of color signals in the

current frame calculated based on said three composite video signals in said current

frame and color signals in the past frame calculated based on the composite video

signals of said past frame; a first selecting means for selecting the difference of said

color signals calculated by said color signal difference calculating means when said first

motion detection signal indicates that there is motion video signal in a current frame, as in claim 4;

A TV receiver for judging motion of an image in accordance with a motion coefficient   generated based on a composite video signal, separating a luminance signal and a color signal from said composite video signal by using a frame comb filter for a still image, A TV receiver for judging motion of an image in accordance with a motion coefficient generated based on a composite video signal, separating a luminance signal and a color signal from said composite video signal by using a frame comb filter for a still image having no motion, luminance signal and a color signal from said composite video signal by using a band pass filter or é two-dimensional comb filter for a moving picture having motion and reproducing a video signal, comprising: a first motion detection unit for finding a separating a difference between a luminance signal included in a predetermined composite video signal in a current frame and a luminance signal included in a composite video signal in a past frame having a predetermined time interval and outputting a first motion detection signal in accordance with the difference; a second motion detection unit for extracting luminance signals included in three composite video signals in said current frame based on three composite video signals having a predetermined interval in a vertical direction in said current frame and three predetermined composite video signals in the vertical direction at the frame position in said past frame, detecting the correlation of color signal components remaining in the extracted video signals, and outputting a second motion detection signal in accordance with the result of the detection; a color signal difference calculating means for

calculating a difference of absolute values of color signals in the current frame

calculated based on said three composite video signals in said current frame and color

signals in the past frame calculated based on the composite video signals of said past

frame; a selecting means for selecting the difference of said color signals calculated by

said color signal difference calculating means when either of said first motion detection

signal or said second motion detection signal indicates that there is motion and

selecting an intended value indicating that there is no motion when both of said first

motion detection signal and said second motion detection signal there is no motion; and

indicate that a motion coefficient generating means for motion coefficient indicating

motion in outputting a accordance with the value selected by said selecting means, as

in claim 7; and,

A TV receiver for judging motion of an image in accordance with a motion

coefficient generated based on a composite video signal, separating a luminance signal

and a color signal from said composite video signal by using a frame comb filter for a

still image having no motion, separating a luminance signal and a color signal from said

composite video signal by using a band pass filter or a two-dimension comb filter for a

moving picture having motion and reproducing the video signal, comprising: a first

motion detection unit for finding a difference between a luminance signal included in a

predetermined composite video signal in a current frame and a luminance signal

included in a composite video signal in a past frame having a predetermined time

interval and outputting a first motion detection signal in accordance with the difference;

a second motion detection unit for luminance signals video signals in said current frame

based on a plurality extracting included in a plurality of composite of composite video signals having a predetermined interval in a vertical direction in said current frame and a plurality of predetermined composite video signals in the vertical direction at the same position in said past frame, detecting the correlation of color signal components remaining in the extracted video signals, and outputting a second motion detection signal in accordance with the result of the detection; a color signal difference calculating means values of color for calculating a difference of absolute signals in the current frame calculated based on said three composite video signals in said current frame and color signals in the past frame calculated based on the composite video signals of said past frame; a first selecting means for selecting the difference of said color signals calculated by said color signal difference calculating means when said first motion detection signal indicates that there is motion and selecting an intended first value indicating that there is no motion when said first motion detection signal indicates that there is no motion; a second selecting means for selecting an intended second value indicating that there is motion when said second motion detection signal indicates that there is motion and selecting the output signal of said first selecting means when said second motion detection signal indicates that there is no motion; and a motion coefficient generating means for outputting a motion coefficient indicating motion in accordance with the value selected by said second selecting means, as in claim 8.
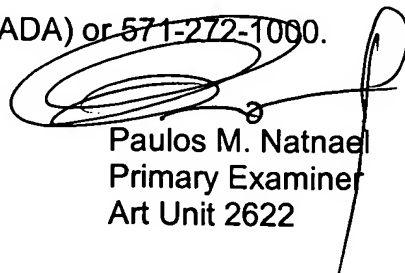
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Paulos M. Natnael whose telephone number is (571)

272-7354. The examiner can normally be reached on 9am - 5:30pm M,W, F (7am-

3:30pm T,Th).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paulos M. Natnael
Primary Examiner
Art Unit 2622

PMN
7/17/06